

Neon Flex Specification



N006096BA3SF(N0612)-Single sided

IP67

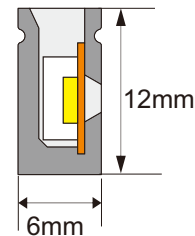
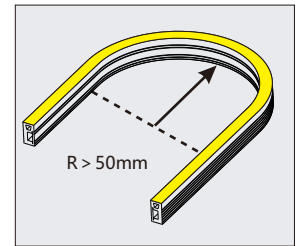


CB
Scheme



Product Parameter

- 06x12 Single sided neon flex led strip, can bend left and right;
- Light source: highlights LED chips;
- Control method: SPI signal, each LED is addressable individually controlled
- Craft material: high -light transmission and environmental -friendly silicone material, good flexibility of silicone material;
- Optical design: Unique optical light structure design, uniform light on the surface, no shadow, no light spots, very soft light;
- Exterior design: simple and fashionable, exquisite and unique brings better lighting performance to indoor/outside applications;
- Product certification: UL, CE, RoHS;
- Environmental characteristics: salt tolerance, corrosion resistance, flame retardant, UV resistance;
- Work / storage temperature: TA: -25 ~ 55 °C / 0 °C ~ 60 °C;
- Product application: signature lighting, outdoor/interior decoration, architectural contour application;
- 2 years of quality insurance, working life ≥36000 hours.

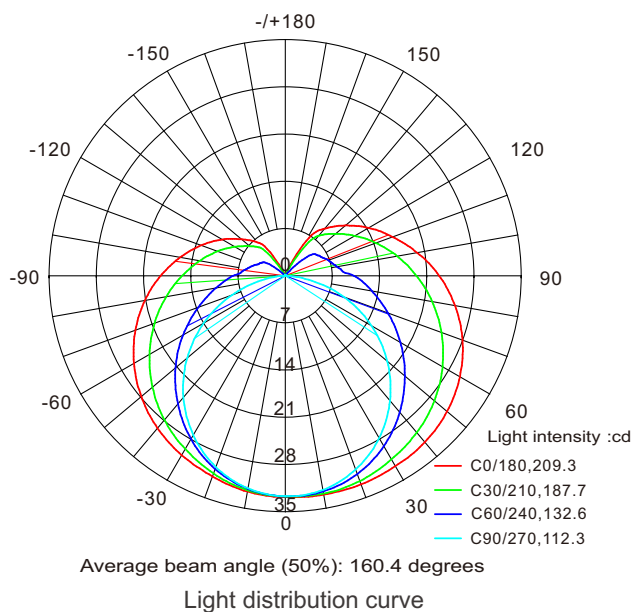


PN	Color	Wavelength	LED Qty/M	Pixel/M	Cutting Length	Voltage	Power	Luminance (lm/m)	Standard Length	Max Length
N006096BA3SF (N0612)- Single sided	RGB	R:620-630nm	SMD2835 96PCS/m	96Pixel SK6812	31.25mm	DC5V	19W/m	R:15.5lm	3025 ±15mm	5m
		G:520-530nm						G:48lm		
		B:460-470nm						B:10.5lm		

Remarks:

1. The above parameters are tested based on 1M standard products;
2. The luminous flux is allowed to have an error range of ±10%;
3. The above parameters are typical values;
4. When this neon led is longer than 5 meters, it needs power from both ends;
5. Subject to change without prior notice.
- 6.Length tolerance applies. Actual product dimensions may vary.

Product light distribution curve



Luminous output: 78.83Lm

1m	10.58, 32.85lx	296.59cm
2m	2.646, 8.214lx	593.18cm
3m	1.176, 3.651lx	889.77cm
4m	0.6614, 2.053lx	1186.36cm
5m	0.4233, 1.314lx	1482.95cm
6m	0.2940, 0.9126lx	1779.54cm
7m	0.2160, 0.6705lx	2076.13cm
8m	0.1653, 0.5134lx	2372.72cm
9m	0.1306, 0.4056lx	2669.31cm
10m	0.1058, 0.3285lx	2965.89cm

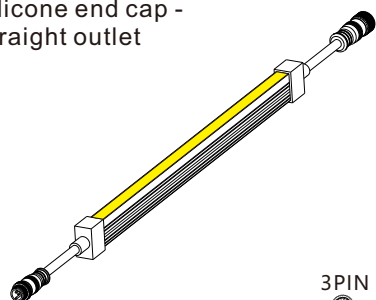
Height Eavg, Emax Angle: 112.01° Diameter

Note: the curve is the illumination area and the average illumination within the area of the lamp under different projection distance

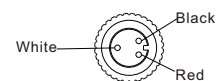
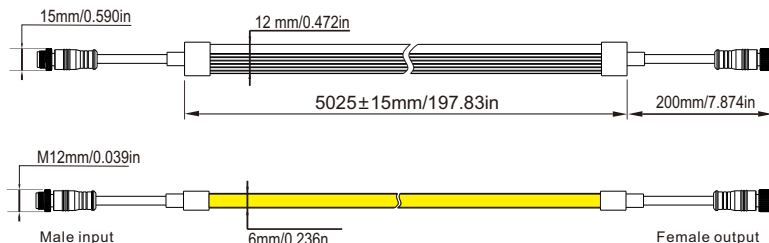
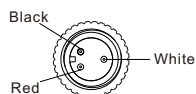
Effective average illumination

Mechanical parameters

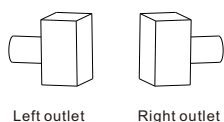
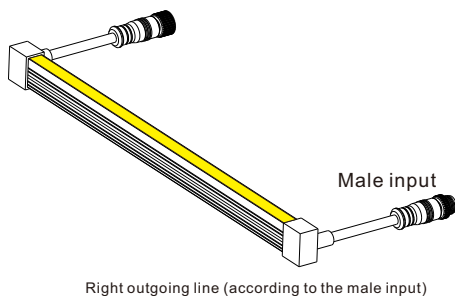
Silicone end cap -
Straight outlet



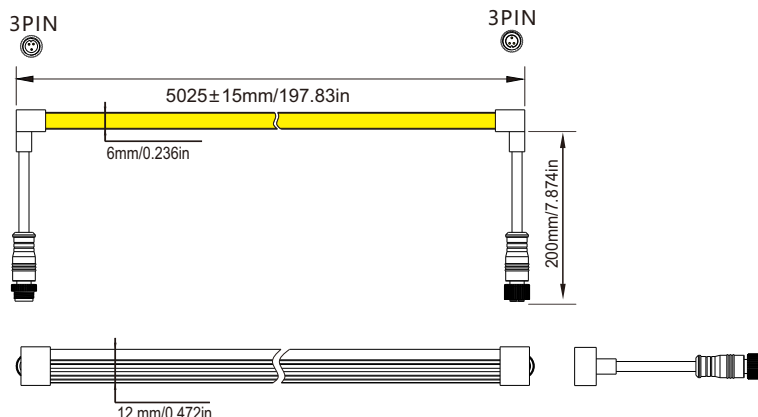
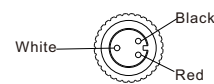
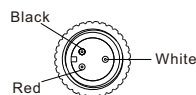
DCSV
DI
GND



Silicone end cap - side outlet



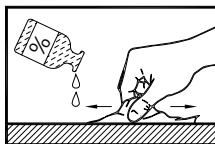
DCSV
DI
GND



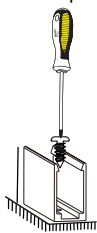
Note: Length tolerance applies. Actual product dimensions may vary.

0612 Installation diagram

Wipe the dust on the installation luminous surface with clean water.

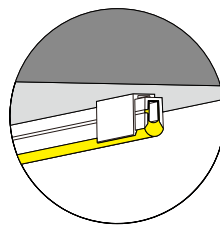
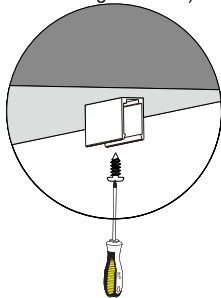


First fix the buckle with screws, and then clip the neon light strip into the buckle. When the length of the neon light strip is greater than 2 meters, two people are required to install it together. (refer to the figure below)

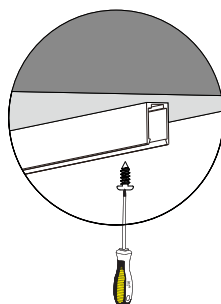
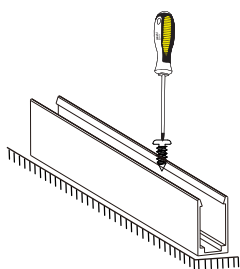
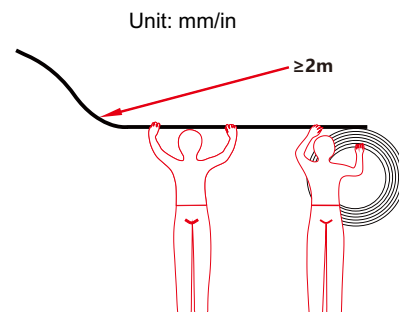


Overall dimension of buckle: L30*W7.5*H13.5mm

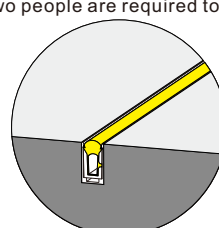
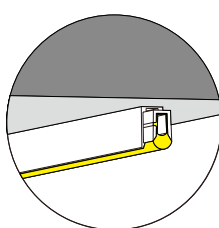
L1.181*W0.291*H0.531in



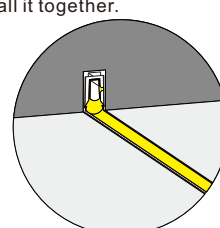
Surface



Surface



Mounted embedded



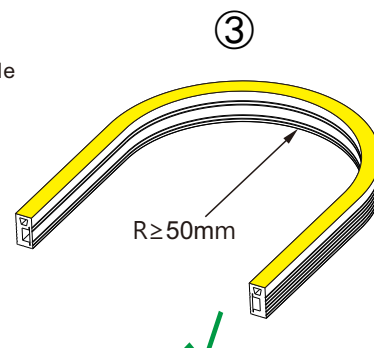
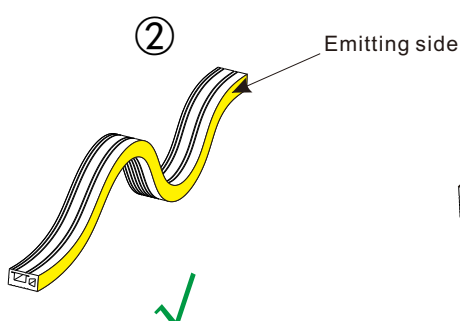
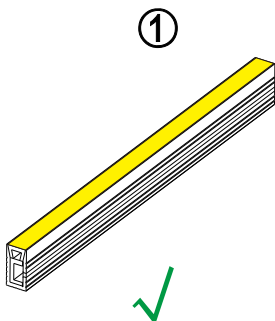
Mounted embedded

When the length of neon light strip is more than 2 meters, two people are required to install it together.

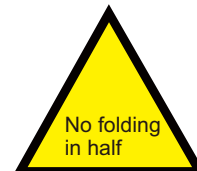
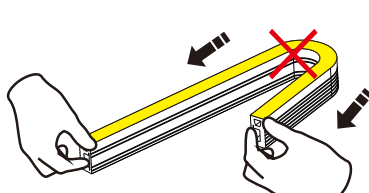
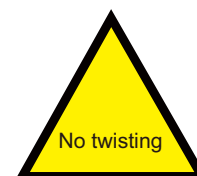
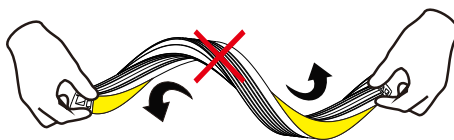
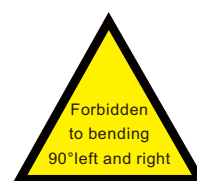
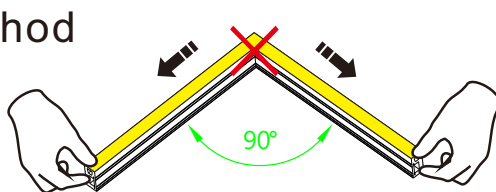
Overall dimension of aluminum profile: L1000*W7.5*H13.5mm

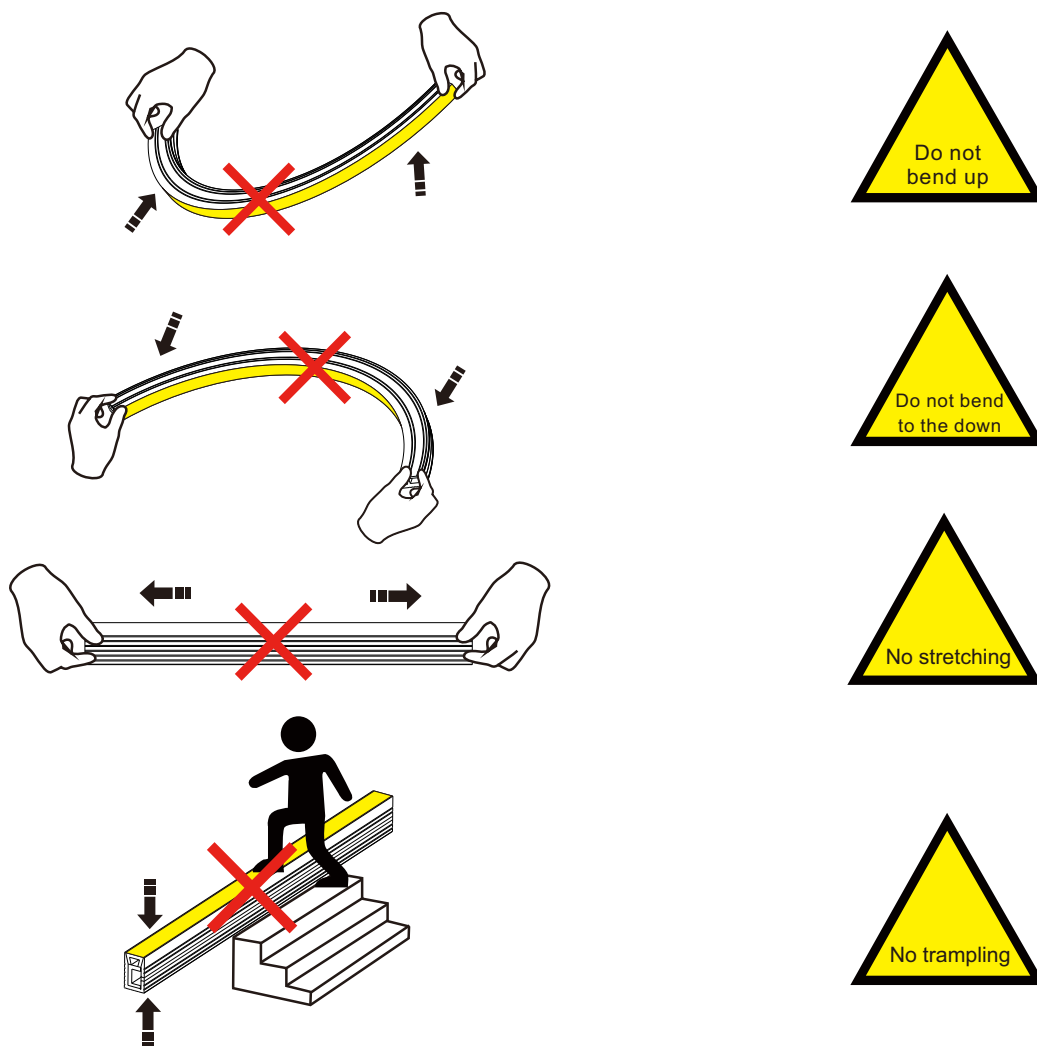
L39.37*W0.291*H0.531in

Correct installation method



Error installation method



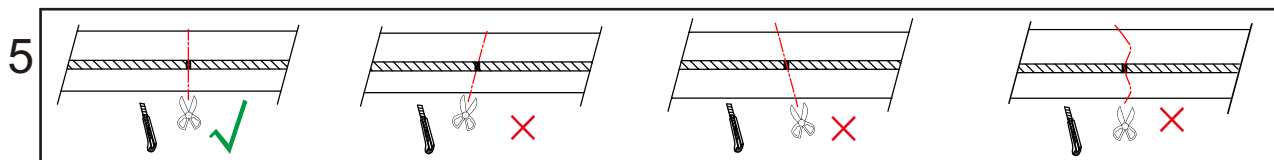
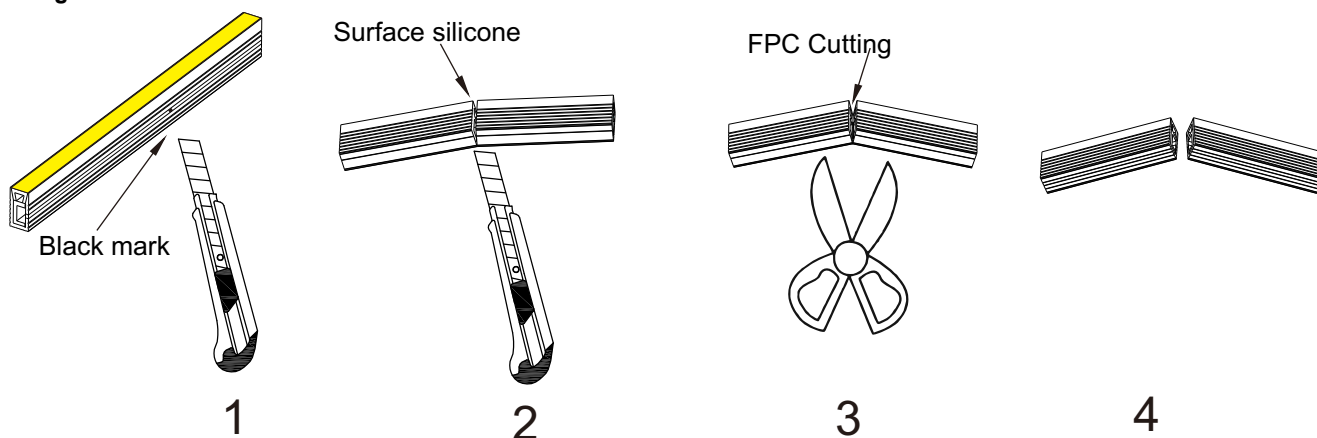


Cutting and the waterproof treatment of both ends

By default, our products will be shipped in regular lengths according to customer requirements.

If the customer has to cut and assemble on site, we can provide some end caps with holes and end caps without holes (all sections can be used). However, please note that in this case, the front and rear ends must be glued for waterproof treatment.

Cutting method



Cutting precautions

Waterproof treatment after cutting

1. The cut output end is glued and plugged with a non hole end cap (Fig. 1);
2. If there is no welding cable at the head and tail ends after cutting, first thread the male wire through the end cap, then weld it to the head end of the LED neon flex, and then apply glue for waterproof treatment (Fig. 2);
3. If there is no cable at the input end of cutting, and the male input cable must be welded (Fig. 3).

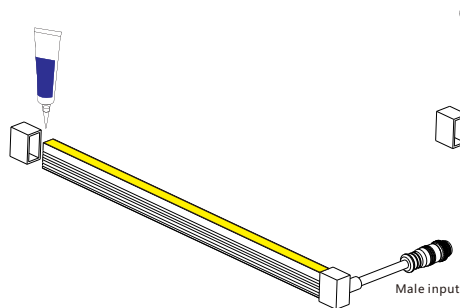
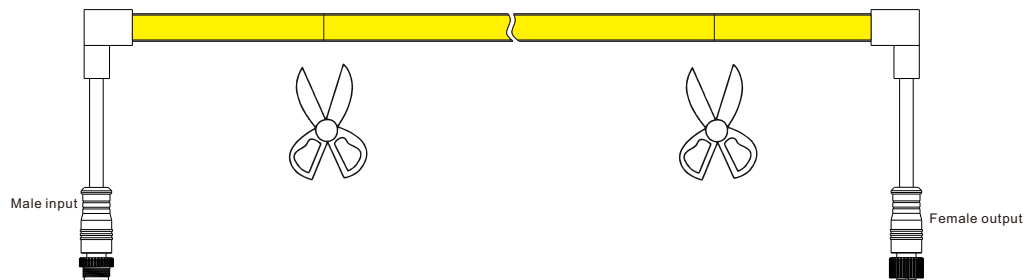


Figure 1

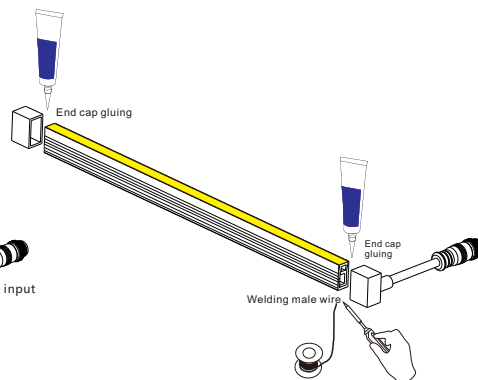


Figure 2

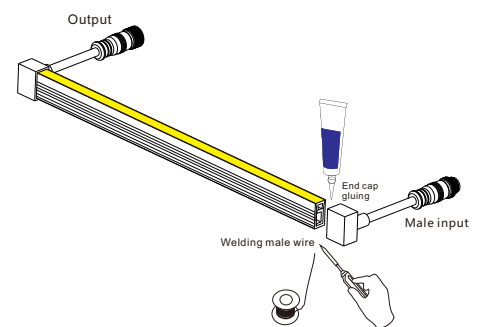


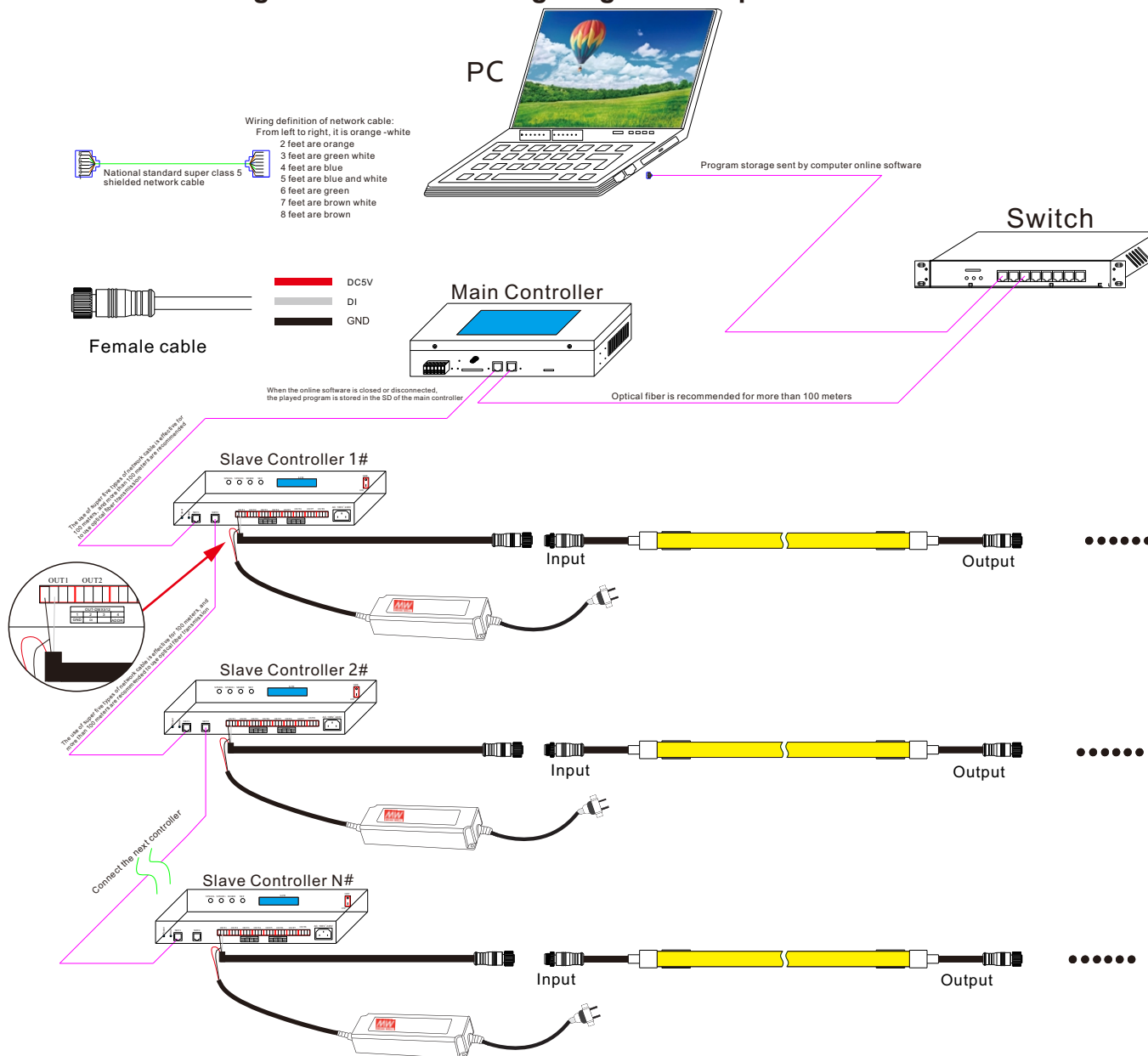
Figure 3

Matters needing attention




- Please use the 5VDC isolation power supply to drive the LED light bar, and the ripple of the constant voltage source is less than 5%. The LED light bar cannot be used to drive the type of power supply and other types of power supply.
- In actual applications, the power supply should be kept by 20% (it is recommended to use only 80% of the power) to ensure a sufficient voltage-driven product.
- Please be careful. When the power is connected, do not touch the AC power supply end to prevent electric shock.
- Pay attention to the positive and negative pole of the power cord. Do not connect the mistake. Whether the power supply and the voltage of the product are consistent, so as not to cause product damage.
- During the installation process, please avoid scraping, twisting and irregular bending of the product, otherwise it may cause damage to the product that cannot be repaired.
- In order to ensure the life and reliability of the light band, please do not bend at the radian of less than 80mm in the radius. The too small bending radius will damage the product itself.
- As the actual application length exceeds the prescribed length, it will lead to the phenomenon such as over loading and incomparable brightness.
- In order to prevent the eyes from being harmed, try to avoid glowing the lights that are lit up for a long time. Non-professional personnel are prohibited from installing, disassembling and maintenance of products.
- It is strictly forbidden to use any acidic, alkaline adhesive fixed product (including not limited to glass glue, etc.).
- Different IP-level use scenarios with different products, IP67 is not suitable for water-soaking environment.
- Different sizes of products Due to the differences in structure at the same color temperature, the product is slightly deviated in the end, and it must be confirmed before use.
- Please use professional tailoring tools when cutting.



Main control - integrated control wiring diagram computer



Product control system solution

Product picture	Name	PN	Product specifications	Applicable products
	Main controller	XS-809-A	Power supply: ac110-240v Power: 10 W Data interface: network interface Memory card type: SDHC card Operating temperature: -10 - 60 Size: 260mm * 160mm * 52mm(L*W*H) Weight: 2.0kg	SPI Neon flex DMX512Neon flex
	Slave controller	T-790	Power supply: ac110-240v Power: 5 W Output type: 4Pin connector Operating temperature: -20 - 85 Size: 310mm * 152mm * 42mm(L*W*H) Weight: 2.0kg	SPI Neon flex DMX512Neon flex
	Offline controller	K-1000C	power supply: DC 5V or DC 12-24V input Power consumption: 2 W Output type: 3pin terminal block Operating temperature: -30 - 85 Size: 159mm * 89mm * 24mm(L*W*H) Weight: 0.35kg	SPI Neon flex DMX512Neon flex

Product Accessories

Name	Describe	Picture	Net weight (g)	Product size (mm)	Remarks
Alum LED Profile	Pre installation slot		63g	L1000xW7.5xH13.5	Aluminum
Alum LED Profile	Pre installation slot		1.83g	L30xW7.5xH13.5	Aluminum
Modeling carrier	Shapable mounting slot		200g	L5000xW7.7xH10.5	Stainless steel
Straight outlet end cap	Silicone front outlet end cap		1.26g	L14xW8xH24	Silicone
Side outlet end cap	Silicone side outlet end cap		1g	L14xW14xH16	Silicone
Seal the end cap	Silicone sealing end cap		0.8g	L14xW8xH13	Silicone
Filling glue	300h mono molecular silica gel		125g	L32xW46xH17	Liquid glue
Female Connector	3PIN connector		23g	φ 15xL200	PVC
Male Connector	3PIN Connector		18g	φ 15xL200	PVC
Connector	3PIN IP65 Connector		/	/	PVC
Power supply	240W waterproof power supply		1.38Kg	L244.2xW68xH38.8	/
Power supply	350W Non-waterproof power supply		0.82Kg	L215xW115xH30	/
Power supply	400W rainproof power supply		1.23Kg	L220.4xW130xH48	/

Product packaging

· Standard packaging

1.For carton packaging, the line label is pasted 80mm away from the end of the line, the information label is pasted on the product, and the product information label and box number label are pasted on the side of the carton,QC inspection stamp.



Voltage & input line
identification



Product information label



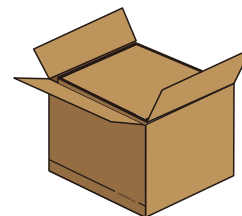
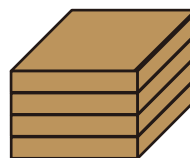
2.For single carton packaging, the line label is pasted 80mm away from the end of the line, the information label is pasted on the product, and the product information label and box number label are pasted on the side of the carton,QC inspection stamp.



Voltage & input line
identification



Product information label



3. For wooden case packaging, the line label is pasted 80mm away from the line end, the information label is pasted on the product, and the product information label and box number label are pasted on the side of the carton,QC inspection stamp.



Voltage & input line
identification



Product information label



Name	Size	Quantity / box	Quantity / box	Net weight of single product (kg)	Net weight of each box (kg)	Gross weight (kg)	Outer box size (mm)
Carton	L5000*6*12mm	5m*8	40m	0.43	3.4	3.9	320*320*110
Carton	L5000*6*12mm	50m*1	50m	4.2	4.2	4.9	320*320*110
Wooden case	Customized to order	/	/	0.43/5m	/	/	/

Reliability testing

Test item	Test requirement	Test standard	Test method or condition
Safety regulation test	Mechanical strength	GB-7000.1	Impact hammer 0.7 J
	Dust and water proof test	GB-7000.1	IP67
	Winding test	GB-7000.1	φ150mm wooden disc, 60N tension, 10 times at room temperature, 10 times after cold treatment (-15°C±2°C, 16h)
	Low temperature winding test	GB-7000.1	Winding the winding shaft, low temperature box -c, after 16h, 15 °C± 2 °C winding the winding shaft for 2 turns
	Low temperature impact test	GB-7000.1	Winding the winding shaft, low temperature box -15°C±5°C, after 16h, winding the winding shaft for 2 turns
	Insulation resistance	GB-7000.1	≤ 2MΩ
	Electrical strength	GB-7000.1	500V
Mechanical reliability test	Left and right bending test	Internal standards	With an interval of 200mm (including welding points), the left and right bends are respectively 100 times
	Distortion test	Internal standards	Twist clockwise for 5 turns and then relax. Repeat for 100 times
	Falling test	Internal standards	100 times of wrestling
Environmental reliability test	High temperature storage	GB/T 2423.2	60°C, 168 hours
	Low temperature storage	GB/T 2423.1	-30°C, 168 hours
	High temperature and humidity operation	GB/T 2423.3	60°C, 85%RH
	Salt spray Test	GB/T 2423.17	5% salt solution concentration, 24h
	IK Test	GB/T 20138	Each exposed surface bears 5 impacts
	Normal temperature aging	Internal standards	25°C, 6000 hours
	Switching impulse	Internal standards	10s on, 10s off, 10000 times